

CLAIMS:

We claim:

1. A method of identifying planned audio segments in a speech application program, the method comprising:

identifying planned audio segments in the speech application program, the audio segments containing audio text to be recorded and associated file names;

extracting the audio segments from the speech application program; and
processing the extracted audio segments to create an audio text recordation plan.

2. The method of claim 1, wherein processing the extracted audio segments includes:

identifying text indicating a programmed pause of a specified duration in the extracted audio segments;

creating a silent audio file of the specified duration; and
modifying the audio segment containing the text indicating the programmed pause.

3. The method of claim 2, wherein processing the extracted audio segments further includes:

determining if the text indicating a programmed pause occurs within the audio text of the extracted audio segment; and

separating the audio text of the extracted audio segments into discrete audio text segments if the programmed pause occurs within the audio text of the extracted audio segment.

4. The method of claim 1, wherein processing the extracted audio segments includes:

identifying text indicating a variable in the extracted audio segments;
determining if the variable has an associated text file containing variable values;
creating a variable audio segment for each said variable value, if the variable has an associated text file; and
modifying the audio segment containing the text indicating the variable.

5. The method of claim 4, wherein processing the extracted audio segments further includes:

determining if the variable occurs within audio text of the audio segment; and
separating the audio text of the extracted audio segments into discrete audio text segments if the variable occurs within the audio text of the extracted audio segment.

6. The method of claim 1, wherein processing the extracted audio segments includes:

determining if the extracted audio segment contains more than one sentence of audio text; and

modifying the extracted audio segments to obtain audio segments containing only one sentence of audio text, if the extracted audio segments contain more than one sentence of audio text.

7. The method of claim 6, wherein processing the extracted audio segments further includes sorting the extracted audio segments.

8. The method of claim 7, wherein processing the extracted audio segments further includes:

- identifying an initial audio segment containing audio text;
- identifying duplicate audio segments containing audio text identical to the audio text in the initial audio segment; and
- deleting the duplicate audio segments.

9. The method of claim 1, wherein processing the extracted audio segments further includes:

- identifying text indicating the presence of a variable in the extracted audio segment;
- determining if a word immediately preceding the variable is a closed class word;
- and
- separating the audio segment into first and subsequent discrete audio segments wherein the first discrete audio segment ends with the word preceding the variable that is not a closed class word.

10. The method of claim 1, wherein the speech application program language is VoiceXML.

11. A computer readable storage medium storing a computer program which when executed identifies and optimizes planned audio segments in speech application program, the computer program performing a method comprising:

identifying planned audio segments in the speech application program, the audio segments containing audio text to be recorded and associated file names;

extracting the audio segments from the speech application program; and

processing the extracted audio segments to create an audio text recordation plan.

12. The machine readable storage medium of claim 11, wherein processing the extracted audio segments further comprises:

identifying text indicating a programmed pause of a specified duration in the extracted audio segments;

creating a silent audio file of the specified duration; and

modifying the audio segment containing the text indicating the programmed pause.

13. The machine readable storage medium of claim 12, wherein processing the extracted audio segments further comprises:

determining if the text indicating a programmed pause occurs within the audio text of the extracted audio segment; and

separating the audio text of the extracted audio segments into discrete audio text segments if the programmed pause occurs within the audio text of the extracted audio segment.

14. The machine readable storage medium of claim 11, wherein processing the extracted audio segments further comprises:

identifying text indicating a variable in the extracted audio segments;
determining if the variable has an associated text file containing variable values;
creating a variable audio segment for each said variable value, if the variable has an associated text file; and
modifying the audio segment containing the text indicating the variable.

15. The machine readable storage medium of claim 14, wherein processing the extracted audio segments further comprises:

determining if the variable occurs within audio text of the audio segment; and
separating the audio text of the extracted audio segments into discrete audio text segments if the variable occurs within the audio text of the extracted audio segment.

16. The machine readable storage medium of claim 11, wherein processing the extracted audio segments comprises:

determining if the extracted audio segment contains more than one sentence of audio text; and

modifying the extracted audio segments to obtain audio segments containing only one sentence of audio text, if the extracted audio segments contain more than one sentence of audio text.

17. The machine readable storage medium of claim 16, wherein processing the extracted audio segments further includes sorting the extracted audio segments.

18. The machine readable storage medium of claim 17 wherein processing the extracted audio segments further comprises:

identifying an initial audio segment containing audio text;

identifying duplicate audio segments containing audio text identical to the audio text in the initial audio segment; and

deleting the duplicate audio segments.

19. The machine readable storage medium of claim 11, wherein processing the extracted audio segments further comprises::

identifying text indicating the presence of a variable in the extracted audio segment;

determining if a word immediately preceding the variable is a closed class word; and

separating the audio segment into first and subsequent discrete audio segments wherein the first discrete audio segment ends with the word preceding the variable that is not a closed class word.

20. The machine readable storage medium of claim 11, wherein the speech application program language is VoiceXML.

21. A system for extracting and optimizing planned audio segments in a speech application program, the audio segments containing audio text to be recorded and associated file names, the system comprising a computer having a central processing unit, the central processing unit extracting audio segments from a speech application program and processing the extracted audio segments in order to create an audio text recordation plan.

22. The system of claim 21, wherein processing the extracted audio segments includes identifying text indicating a programmed pause of a specified duration in the extracted audio segments, creating a silent audio file of the specified duration, and modifying the audio segment containing the text indicating the programmed pause.

23. The system of claim 22, wherein processing the extracted audio segments further includes determining if the text indicating a programmed pause occurs within the audio text of the extracted audio segment, and separating the audio text of the extracted

audio segments into discrete audio text segments if the programmed pause occurs within the audio text of the extracted audio segment.

24. The system of claim 21, wherein processing the extracted audio segments further includes identifying text indicating a variable in the extracted audio segments, determining if the variable has an associated text file containing variable values, creating a variable audio segment to for each said variable value, if the variable has an associated text file, and modifying the audio segment containing the text indicating the variable.

25. The system of claim 24, wherein processing the extracted audio segments further includes determining if the variable occurs within audio text of the audio segment, and separating the audio text of the extracted audio segments into discrete audio text segments if the variable occurs within the audio text of the extracted audio segment.

26. The system of claim 21, wherein processing the extracted audio segments further includes determining if the extracted audio segment contains more than one sentence of audio text, and modifying the extracted audio segments to obtain audio segments containing only one sentence of audio text, if the extracted audio segments contain more than one sentence of audio text.

27. The system of claim 26, wherein processing the extracted audio segments further includes sorting the extracted audio segments.

28. The system of claim 27, wherein processing the extracted audio segments further includes identifying an initial audio segment containing audio text, identifying duplicate audio segments containing audio text identical to the audio text in the initial audio segment, and deleting the duplicate audio segments.

29. The system of claim 21, wherein processing the extracted audio segments further includes identifying text indicating the presence of a variable in the extracted audio segment, determining if a word to immediately preceding the variable is a closed class word, and separating the audio segment into first and subsequent discrete audio segments wherein the first discrete audio segment ends with the word preceding the variable that is not a closed class word.